30" Fence and Rail System
(Model 36-648)

INSTRUCTIONS

SHOWN ASSEMBLED TO MODEL 36-649

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SAFETY GUIDELINES - DEFINITIONS

This manual contains information that is important for you to know and understand. This information relates to protecting YOUR SAFETY and PREVENTING EQUIPMENT PROBLEMS. To help you recognize this information, we use the symbols to the right. Please read the manual and pay attention to these sections.

⚠DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION Used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in property damage.

INTRODUCTION

The Delta Model 36-648 30" Fence and Rail System can be assembled to the Delta Model 36-649 10" Professional Table Saw. The Model 36-648 is a heavy duty fence that has a rip capacity of 30" to the right side of the blade.

NOTICE: THE MANUAL COVER PHOTO ILLUSTRATES THE CURRENT PRODUCTION MODEL. ALL OTHER ILLUSTRATIONS ARE REPRESENTATIVE ONLY AND MAY NOT DEPICT THE ACTUAL COLOR, LABELING OR ACCESSORIES AND MAY BE INTENDED TO ILLUSTRATE TECHNIQUE ONLY.

CARTON CONTENTS

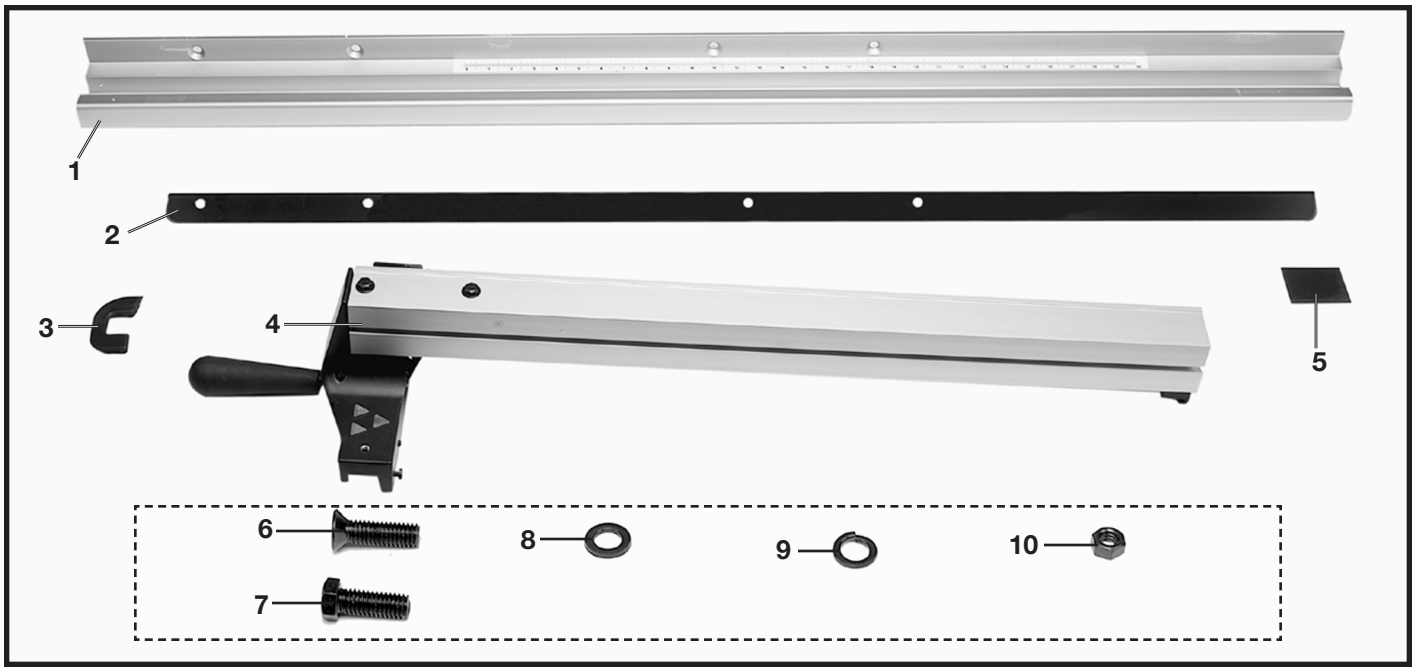


Fig. 2

1. Front Guide Rail
2. Rear Rail
3. Guide Rail End Cap (2)
4. Fence
5. Fence End Cap
6. 3/8-16x1½" Flat Head Screw (4)
7. 3/8-16x1" Hex Head Screw (4)
8. 3/8" Flat Washer (8)
9. 3/8" Lockwasher (8)
10. 3/8-16 Hex Nut (8)

ASSEMBLY

FRONT GUIDE RAIL AND SWITCH ASSEMBLY

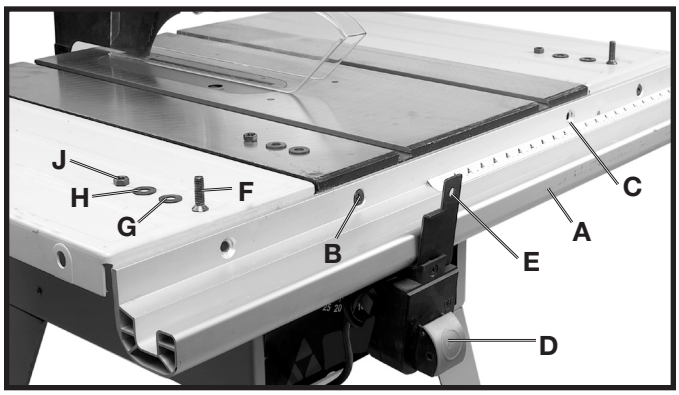


Fig. 3

1. Loosely assemble front guide rail (A) Fig. 3, to the front of the saw table. Align the two holes (B) and (C) with the two holes in the saw table. Insert a 3/8-16x1-1/2" flat head screw (F) Fig. 3, through holes (B) and (C) in the front guide rail (A) and the holes in the front of the saw table. Place hole in switch bracket (E) Fig. 3, on screw (B) located behind the inner lip of the saw table. Place a 3/8" flat washer (G) and a 3/8 lockwasher (H), onto the flat head screw (F). Thread a 3/8-16 hex nut (J), onto the flat head screw (F). Repeat this process for the remaining hole (C) in the guide rail and the saw table.

2. Loosely fasten guide rail (A) Fig. 4, to the left and right extension wings. Align the the hole (B) Fig. 4, in the left side of the guide rail with the hole on the left extension wing. Insert a 3/8-16x1-1/2" flat head screw through the hole (B) in the front guide rail (A) and the hole in the front of the left extension wing. Place a 3/8" flat washer and a 3/8 lockwasher onto the flat head screw. Thread a 3/8-16 hex nut onto the flat head screw. Repeat this process for the remaining hole in the guide rail and the right extension wing.

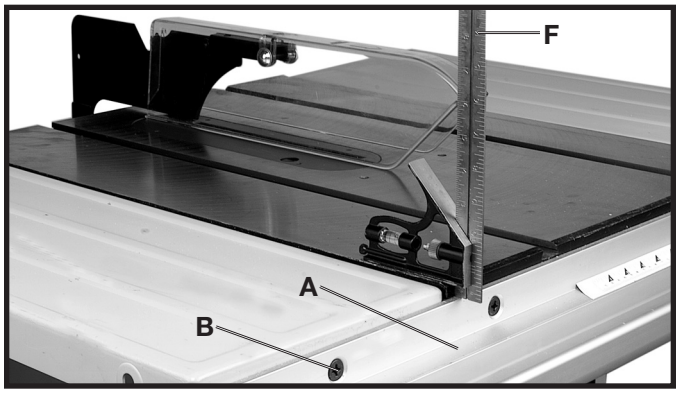


Fig. 4

3. Before tightening the hardware holding the guide rail to the saw table, proceed as follows: Beginning at the two sides of the saw table and using an adjustable square (F) Fig. 4, or a ruler, check to make certain the guide rail (A) is parallel with the saw table and extension wings. Tighten all guide rail mounting hardware.

4. Insert end cap (G) Fig. 5, onto each end of the guide rail (D) as shown. Using a block of wood and hammer, gently tap end caps until they are completely seated into each end of the guide rail. **NOTE:** Do not use a hammer directly against the end caps, this could cause damage to the aluminum rail.

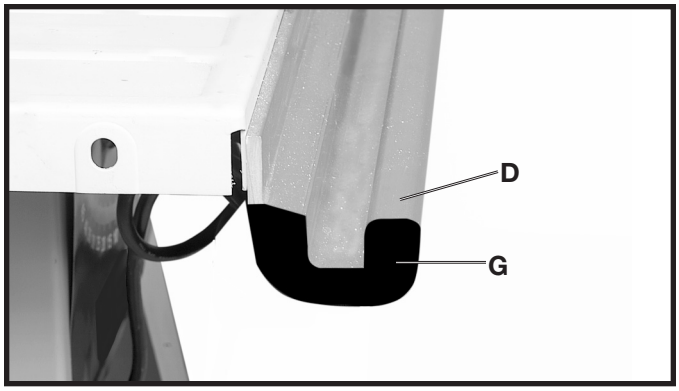


Fig. 5

REAR RAIL

1. Align holes in saw table and extension wings with four holes in rear guide rail (J) Fig. 6. **NOTE:** Flat edge of rear guide rail (J) will face upward. Insert a 3/8-16x1" hex head screw (A) Fig. 43, through hole in rear guide rail and hole in saw table. Place a 3/8" flat washer (B) Fig. 6, and a 3/8" lock washer (C), onto the hex head screw. Thread a 3/8-16 hex nut (D), onto the hex head screw. Repeat this process for the three remaining holes in the rear guide rail and the saw table and extension wings.

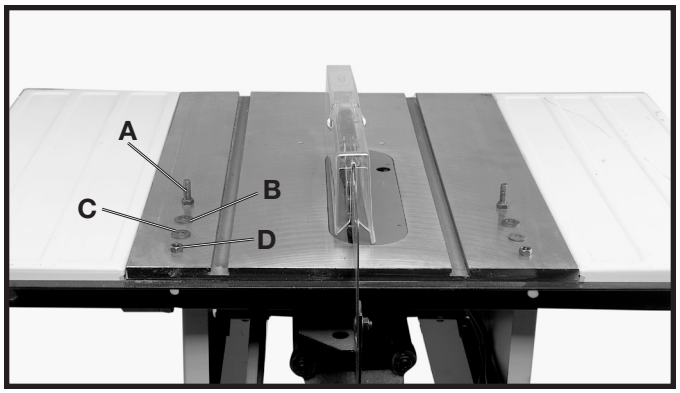


Fig. 6

2. Before tightening mounting hardware, using an adjustable square (F) Fig. 7, or a ruler, check to make certain the rear guide rail (J) is parallel with the saw table and extension tables.

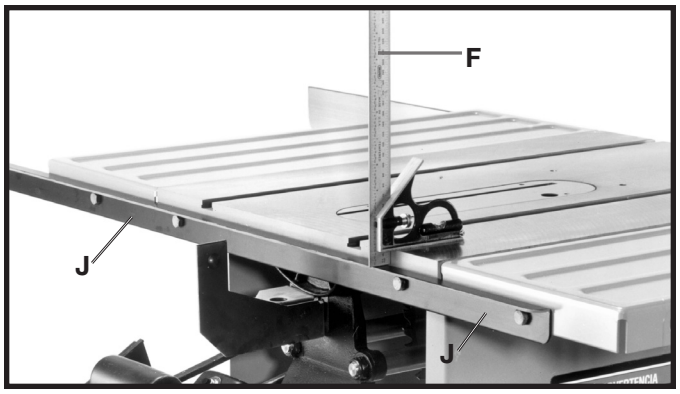


Fig. 7

RIP FENCE TO GUIDE RAILS

1. Insert end cap (A) Fig. 8, into back of rip fence (B).

2. With the fence handle (A) Fig. 9, in the raised position, place the rip fence (B) onto the rear guide rail (C) so the hooked end (D) Fig. 8, fits over the top ledge of the guide rail as shown.

3. Lower the front of rip fence (B) Fig. 9, onto the front guide rail (L).

4. Lock the rip fence (B) Fig. 9, on the guide rails by pushing down handle (A).

5. Slide rip fence (B) Fig. 9, against one edge of the miter gage slot (C) as shown. Clamp the fence onto the guide rail by pushing down on lock handle (A). The edge of the fence (B) Fig. 9, should line up so it is parallel with the edge of the miter gage slot. If an adjustment is necessary, pull up on lock handle (A) to loosen fence, tighten or loosen either of two screws (D) Fig. 10, as necessary until rip fence (B) Fig. 9, lines up with the miter gage slot. **NOTE:** Cursor has been removed for clarity.

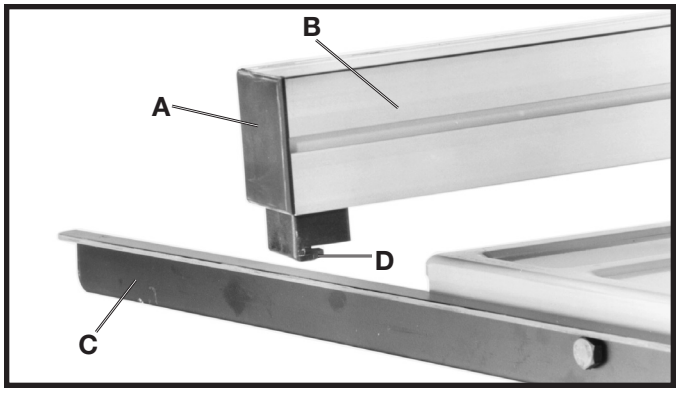


Fig. 8

Fig. 9

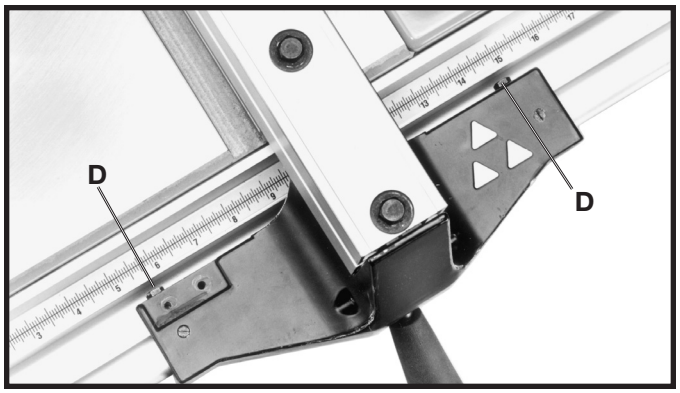


Fig. 10

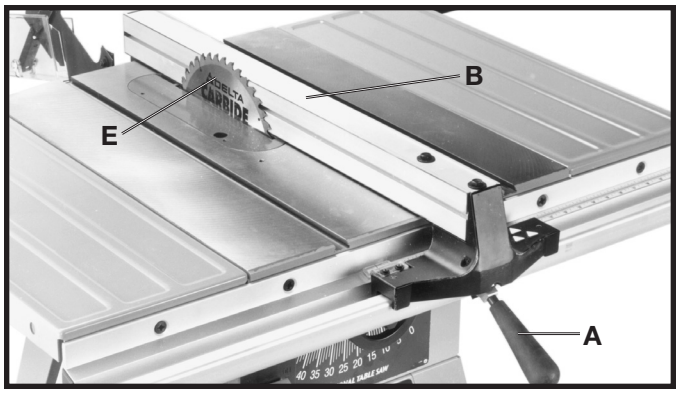


Fig. 11

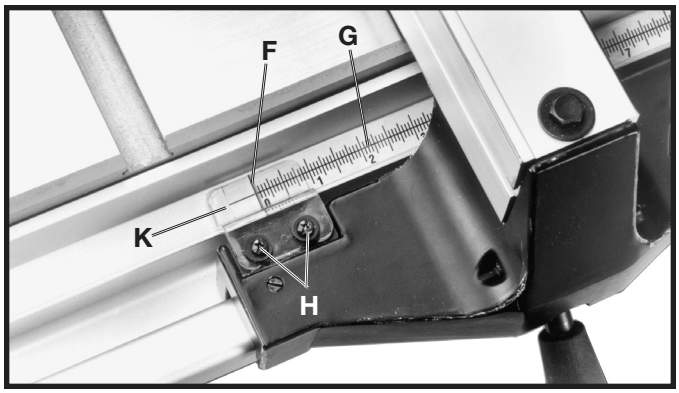


Fig. 12

6. Once the rip fence is aligned with the miter gage slot, raise the saw blade (E) Fig. 11, to its highest position, as shown. Slide rip fence (B) against the saw blade (E) and lock the fence in that position by pushing down on handle (A).

7. The cursor witness line (F) Fig. 12, should line up with the "zero" mark on scale (G). If the witness line does not line up with the "zero" line on the scale, loosen two screws (H) and adjust cursor (K).

ADJUSTMENTS

RIP FENCE

The rip fence can be used on either side of the saw blade. The most common location is on the right side and is guided by means of guide rails which are fastened to the front and rear of the table.

To move the rip fence, raise the lock handle (A) Fig. 13, as far as it will go and move the fence to the desired position on the table. When the lock handle (A) Fig. 13, is pushed down, clamping action on the rip fence (B) should be adequate. However, if the clamping action is too loose or too tight, an adjustment can be made by equally tightening or loosening two screws (C) as necessary, see the section **"RIP FENCE TO GUIDE RAIL"** for detailed instructions. **NOTE:** It will be necessary to remove the cursor (D) Fig. 15, to make this adjustment.

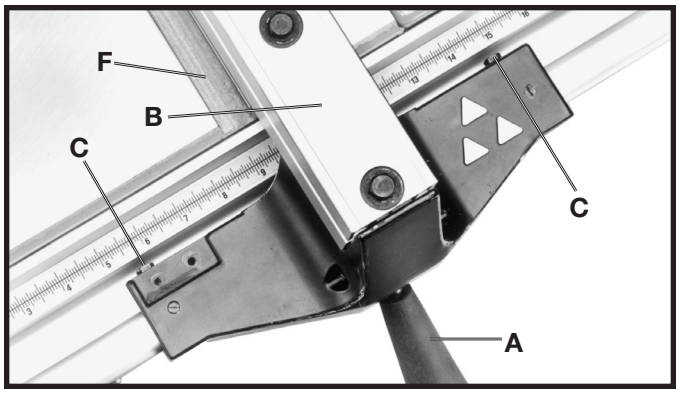


Fig. 13

⚠WARNING THE BLADE FLANGE (FOR DELTA TABLE SAW MODEL 36-649) IS SET PARALLEL TO THE MITER GAGE SLOT AT THE FACTORY AND THE RIP FENCE MUST BE PROPERLY ALIGNED TO THE MITER GAGE SLOT IN ORDER TO PREVENT "KICKBACK" WHEN RIPPING.

⚠CAUTION THE RIP FENCE MUST BE PERPENDICULAR TO AND LEVEL WITH THE SAW TABLE.

4. Using a square (G) Fig. 14, check to see if the rip fence (B) is perpendicular to the saw table and that the rip fence body is level with the saw table. If an adjustment is necessary, tighten or loosen either of two screws (K), until the fence is perpendicular and level with the saw table.

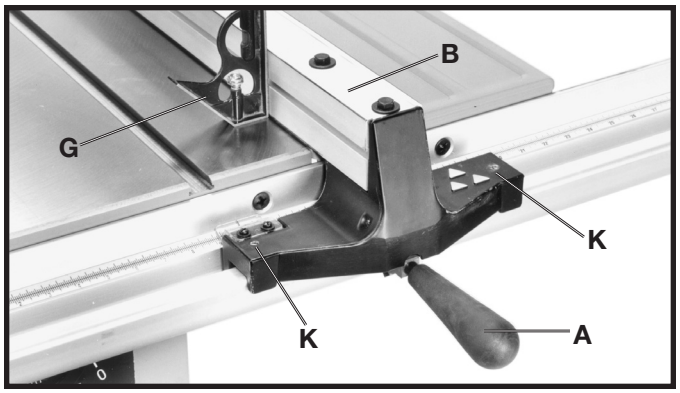


Fig. 14

5. Depending on the type of saw blade being used, the cursor (D) Fig. 15, may need adjustment to compensate for the blade thickness.To adjust the cursor, make a test cut on a piece of lumber and measure the finished cut, or you can place the rip fence against the blade as shown earlier in the manual. If a minor adjustment is necessary, loosen two screws (E) Fig. 15, and move the cursor (D) as necessary.

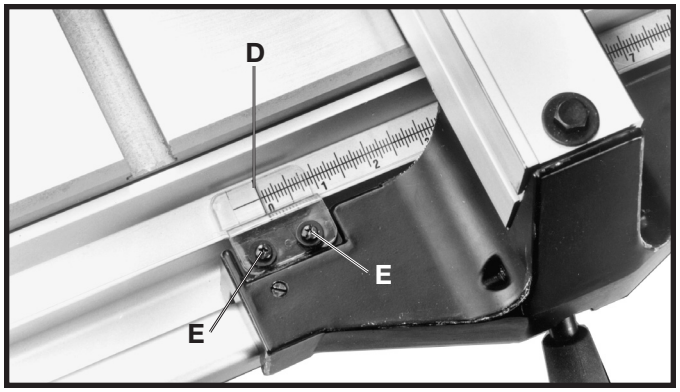


Fig. 15

OPERATIONS

Common sawing operations include ripping and crosscutting plus a few other standard operations of a fundamental nature. As with all power machines, there is a certain amount of hazard involved with the operation and use of the machine. Using the machine with the respect and caution demanded as far as safety precautions are concerned, will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or completely ignored, personal injury to the operator can result. The following information describes the safe and proper method for performing the most common sawing operations. **NOTICE: THE PICTURES IN THIS SECTION ARE INTENDED TO ILLUSTRATE TECHNIQUE ONLY.**

⚠WARNING THE USE OF ATTACHMENTS AND ACCESSORIES NOT RECOMMENDED BY DELTA MAY RESULT IN THE RISK OF INJURY TO PERSONS.

CUT-OFF

⚠WARNING NEVER USE THE FENCE AS A CUT-OFF GAGE WHEN CROSS-CUTTING.

⚠CAUTION When using the block (B) Fig. 16, as a cut-off gage, it is very important that the rear end of the block be positioned so the work piece is clear of the block before it enters the blade.

When cross-cutting a number of pieces to the same length, a block of wood (B), can be clamped to the fence and used as a cut-off gage as shown in Fig. 16. It is important that this block of wood always be positioned in front of the saw blade as shown. Once the cut-off length is determined, secure the fence and use the miter gage to feed the work into the cut.

This block of wood allows the cut-off piece to move freely along the table surface without binding between the fence and the saw blade, thereby lessening the possibility of kickback and injury to the operator.

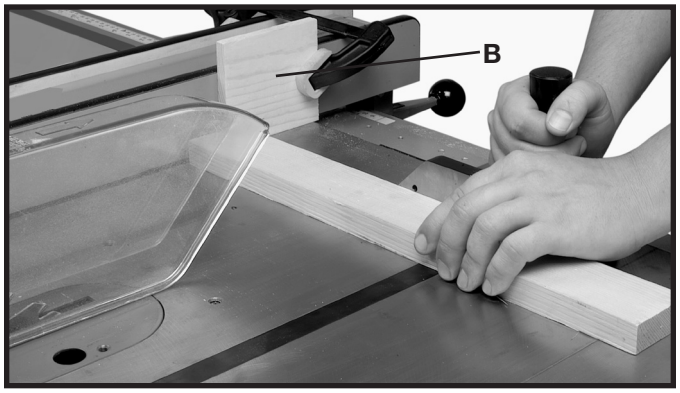


Fig. 16

RIPPING

⚠WARNING A RIP FENCE SHOULD ALWAYS BE USED FOR RIPPING OPERATIONS. NEVER PERFORM A RIPPING OPERATION FREE-HAND.

Ripping is the operation of making a lengthwise cut through a board, as shown in Fig. 17, and the rip fence (A) is used to position and guide the work. One edge of the work rides against the rip fence while the flat side of the board rests on the table. Since the work is pushed along the fence, it must have a straight edge and make solid contact with the table. The saw guard must be used. The guard has anti-kickback fingers to prevent wood kickback, and a splitter to prevent the wood kerf from closing and binding the blade.

Start the motor and advance the work holding it down and against the fence. Never stand in the line of the saw cut when ripping. Hold the work with both hands and push it along the fence and into the saw blade as shown in Fig. 17. The work can then be fed through the saw blade with one or two hands. After the work is beyond the saw blade and anti-kickback fingers, the hand is removed from the work. When this is done the work will either stay on the table, tilt up slightly and be caught by the rear end of the guard or slide off the table to the floor. Alternately, the feed can continue to the end of the table, after which the work is lifted and brought back along the outside edge of the fence. The cut-off stock remains on the table and is not touched with the hands until the saw blade is stopped, unless it is a large piece allowing safe removal. When ripping boards longer than three feet, it is recommended that a work support be used at the rear of the saw to keep the workpiece from falling off the saw table.

⚠WARNING If the ripped work is less than 4 inches wide, a push stick should always be used to complete the feed, as shown in Fig. 18. The push stick can easily be made from scrap material as explained in the section **"CONSTRUCTING A PUSH STICK."** When ripping material under 2 inches in width, a flat pushboard is a valuable accessory since ordinary push sticks may interfere with the blade guard. The flat pushboard can be made as shown in Fig. 19.

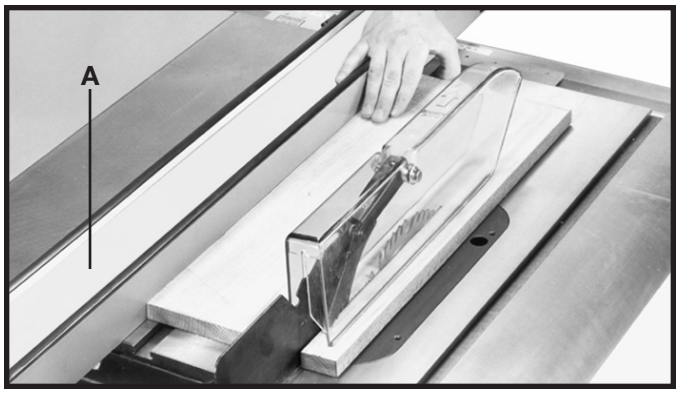


Fig. 17

Fig. 18

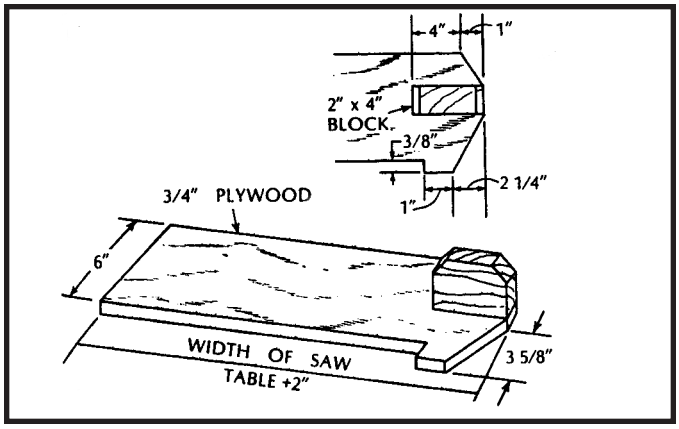


Fig. 19

USING AUXILIARY WOOD FACING ON RIP FENCE

⚠CAUTION It is necessary when performing special operations such as moulding to add wood facing (A) Fig. 20, to one or both sides of the rip fence, as shown. The wood facing is attached to the fence with two clamps (B). 3/4 inch stock is suitable for most work although an occasional job may require 1 inch facing.

A wood facing should be used when ripping thin material such as paneling to prevent the material from catching between the bottom of the rip fence and the saw table surface.

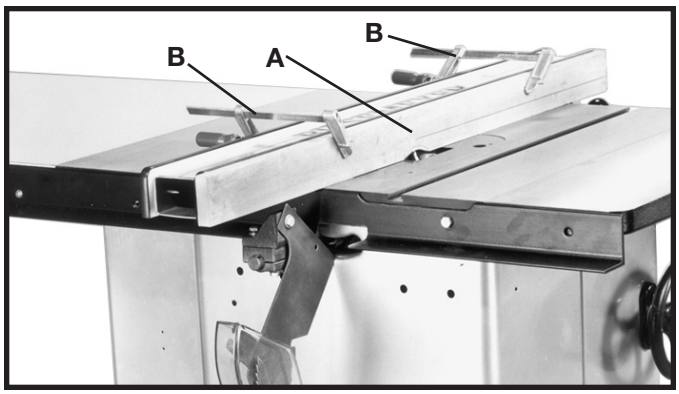


Fig. 20

MAINTENANCE

FENCE LUBRICATION

1. Apply paste wax to fence and guide tube sliding surfaces weekly.

2. Apply grease to cam lock (A) Fig. 21, and cam foot (B) occasionally to prevent wear.

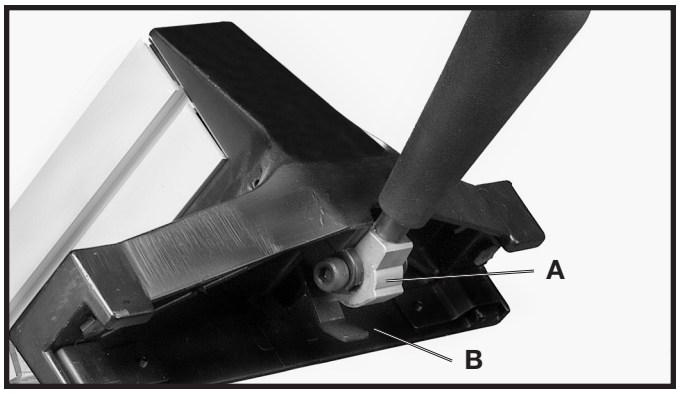


Fig. 21

FEATHERBOARDS AND PUSH STICKS

CONSTRUCTING A FEATHERBOARD

Fig. 23, illustrates dimensions for making a typical featherboard. The material which the featherboard is constructed of, should be a straight piece of wood that is free of knots and cracks. Featherboards are used to keep the work in contact with the fence and table and help prevent kickbacks. Clamp the featherboards to the fence and table so that the leading edge of the featherboards will support the workpiece until the cut is completed.

⚠WARNING Use featherboards for all non "thru-sawing" operations where the guard and spreader assembly cannot be used (see Fig. 22). Always replace the guard and spreader assembly when the non thru-sawing operation is completed.

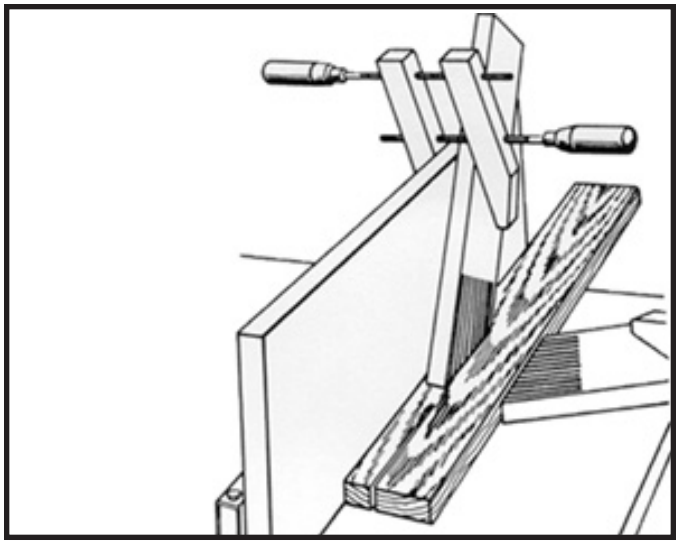


Fig. 22

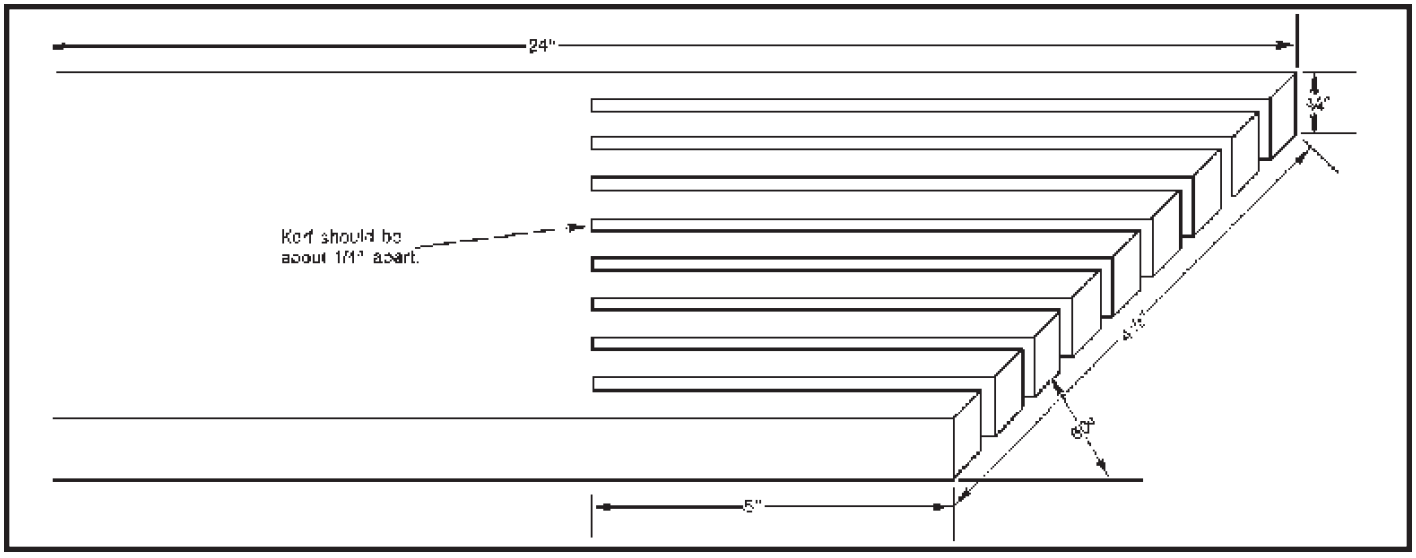
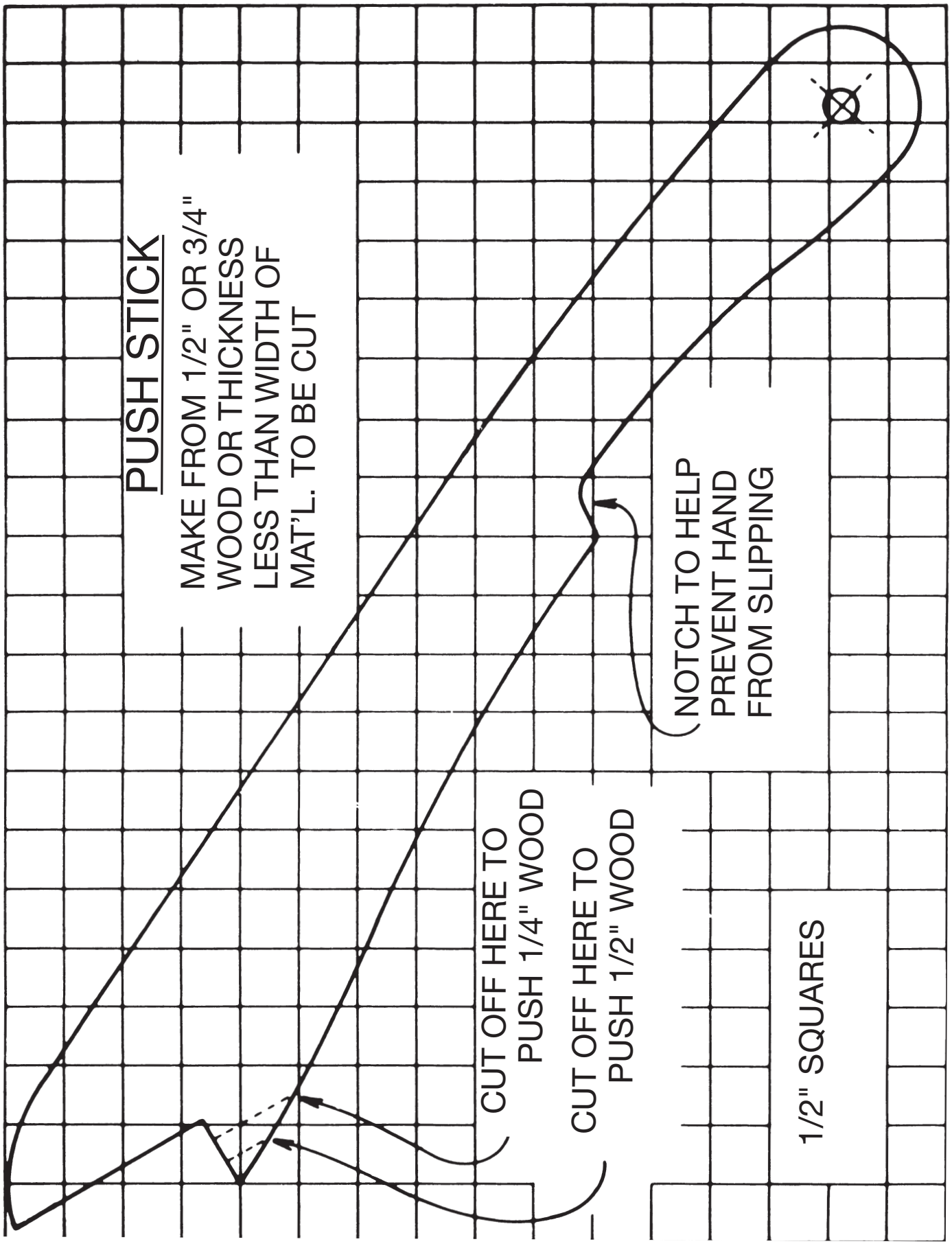


Fig. 23

CONSTRUCTING A PUSH STICK

When ripping work less than 4 inches wide, a push stick should be used to complete the feed and could be made from scrap material by following the pattern shown.



NOTES

ACCESSORIES

A complete line of accessories is available from your Delta Supplier, Porter-Cable • Delta Factory Service Centers, and Delta Authorized Service Stations. Please visit our Web Site **www.deltamachinery.com** for a catalog or for the name of your nearest supplier.

⚠WARNING Since accessories other than those offered by Delta have not been tested with this product, use of such accessories could be hazardous. For safest operation, only Delta recommended accessories should be used with this product.

PARTS, SERVICE OR WARRANTY ASSISTANCE

All Delta Machines and accessories are manufactured to high quality standards and are serviced by a network of Porter-Cable • Delta Factory Service Centers and Delta Authorized Service Stations. To obtain additional information regarding your Delta quality product or to obtain parts, service, warranty assistance, or the location of the nearest service outlet, please call 1-800-223-7278 (In Canada call 1-800-463-3582).

Two Year Limited New Product Warranty

Delta will repair or replace, at its expense and at its option, any new Delta machine, machine part, or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to a Delta factory service center or authorized service station with proof of purchase of the product within two years and provides Delta with reasonable opportunity to verify the alleged defect by inspection. For all refurbished Delta product, the warranty period is 180 days. Delta may require that electric motors be returned prepaid to a motor manufacturer's authorized station for inspection and repair or replacement. Delta will not be responsible for any asserted defect which has resulted from normal wear, misuse, abuse or repair or alteration made or specifically authorized by anyone other than an authorized Delta service facility or representative. Under no circumstances will Delta be liable for incidental or consequential damages resulting from defective products. This warranty is Delta's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Delta.

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Phone: (972) 446-2996
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Fax: (253) 333-9613

Authorized Service Stations are located in many large cities. Telephone **800-438-2486** or **731-541-6042** for assistance locating one. Parts and accessories for Porter-Cable·Delta products should be obtained by contacting any Porter-Cable·Delta Distributor, Authorized Service Center, or Porter-Cable·Delta Factory Service Center. If you do not have access to any of these, call **800-223-7278** and you will be directed to the nearest Porter-Cable·Delta Factory Service Center. Las Estaciones de Servicio Autorizadas están ubicadas en muchas grandes ciudades. Llame al **800-438-2486** ó al **731-541-6042** para obtener asistencia a fin de localizar una. Las piezas y los accesorios para los productos Porter-Cable·Delta deben obtenerse poniéndose en contacto con cualquier distribuidor Porter-Cable·Delta, Centro de Servicio Autorizado o Centro de Servicio de Fábrica Porter-Cable·Delta. Si no tiene acceso a ninguna de estas opciones, llame al **800-223-7278** y le dirigirán al Centro de Servicio de Fábrica Porter-Cable·Delta más cercano.

CANADIAN PORTER-CABLE • DELTA SERVICE CENTERS

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Calgary, Alberta
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Phone: (403) 735-6166
Fax: (403) 735-6144

BRITISH COLUMBIA
8520 Baxter Place
Burnaby, B.C.
V5A 4T8
Phone: (604) 420-0102
Fax: (604) 420-3522

MANITOBA
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Winnipeg, Manitoba
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Phone: (204) 633-9259
Fax: (204) 632-1976

ONTARIO
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Guelph, Ontario
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Phone: (519) 767-4132
Fax: (519) 767-4131

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